

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference PSD41456PCT1	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/EP 03/50672	International filing date (day/month/year) 30/09/2003	(Earliest) Priority Date (day/month/year) 10/10/2002
Applicant NOKIA CORPORATION		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 7 sheets.

☐ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☒ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

☐ the text is approved as submitted by the applicant.

☒ the text has been established by this Authority to read as follows:

DEVICE OPERABLE AS BOTH A HOST AND A NON-HOST (I.E. DUAL-MODE DEVICE)

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

☒ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

1
☐ None of the figures.

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International application No.
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Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.

2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-6, 19

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-6,19.

Device connected to a bus via a port, the device operating as a host device, if no other host device is detected and relinquishing host status on detection of another host device,
wherein
power is supplied to a voltage supply line from the device operating as a host device
whereby
non-host devices lacking an autonomous power supply, eg. portable ones, may connected to the bus.

1.1. claims: 14-17

Device connected to a bus via a port, the device operating as a host device, if no other host device is detected and relinquishing host status on detection of another host device,
wherein
the bus is a USB bus

2. claim: 7

Device connected to a bus via a port, the device operating as a host device, if no other host device is detected and relinquishing host status on detection of another host device,
wherein
the device is arranged for causing at least some lines of the port to be forced tristate on detecting the presence of another host
whereby
each transfer is guaranteed a well-defined logic level and destruction of the respective busline and associated electronics is avoided.

3. claim: 8

Device connected to a bus via a port, the device operating as a host device, if no other host device is detected and relinquishing host status on detection of another host device,
wherein
the device includes means to send a reset command via the bus on detecting the presence of another host
whereby
all bus connected devices are returned to a known state.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

4. claims: 9-10

Device connected to a bus via a port, the device operating as a host device, if no other host device is detected and relinquishing host status on detection of another host device,
wherein
the device has means for detecting the loss of the other host and in response thereto (the device) takes over as host
whereby
the bus always has a device acting as host

5. claims: 11,18

Device connected to a bus via a port, the device operating as a host device, if no other host device is detected and relinquishing host status on detection of another host device,
wherein
the device has a first and second port
whereby
the device can be connected to more than one other device

6. claim: 12

Device connected to a bus via a port, the device operating as a host device, if no other host device is detected and relinquishing host status on detection of another host device,
wherein
the device is a battery pack
whereby
the device can operate independently of the mains

7. claim: 13

Device connected to a bus via a port, the device operating as a host device, if no other host device is detected and relinquishing host status on detection of another host device,
wherein
the device includes a digital video broadcast receiver
whereby
digital television can be watched

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A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G06F13/368

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EP0-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	CYPRESS SEMICONDUCTOR CORP.: "USB ON-THE-GO PROTOCOL" WWW.USB.ORG, [Online] 26 February 2002 (2002-02-26), XP002283463 Retrieved from the Internet: URL: http://web.archive.org/web/20040603235613/http://www.usb.org/data/developers/otg/presentations/london/OTG_protocol.pdf [retrieved on 2004-06-03] page 4 - page 70	1-6,14, 15,17,19
Y	-----	16
X	"On-The-Go supplement to the USB 2.0 specification, Revision 1.0" UNIVERSAL SERIAL BUS (USB), XX, XX, 18 December 2001 (2001-12-18), pages 1-66,1, XP002952944 page 3 - page 39 -----	1-6,14, 15,17,19
Y	-----	16
	-/-	



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

23 June 2004

Date of mailing of the international search report

14/09/2004

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	EP 1 229 747 A (MITSUBISHI) 7 August 2002 (2002-08-07) page 6 - page 8 -----	16

Information on patent family members

PCT 03/50672

EP 1229747	A	07-08-2002	JP	2002232548	A	16-08-2002
			CN	1370029	A	18-09-2002
			EP	1229747	A2	07-08-2002
			US	2002137506	A1	26-09-2002